16 83

RECEIVED

OIPE

ENTERED

```
 3 <110> APPLICANT: Warner-Lambert Company
 5 <120> TITLE OF INVENTION: Gene Encoding Syntaxin Interacting Protein
 7 <130> FILE REFERENCE: 09/647,978
 9 <140> CURRENT APPLICATION NUMBER: 09/647,978A
10 <141> CURRENT FILING DATE: 2000-10-06
12 <150> PRIOR APPLICATION NUMBER: PCT/US99/08568
13 <151> PRIOR FILING DATE: 1999-04-19
15 <150> PRIOR APPLICATION NUMBER: 60/082,454
16 <151> PRIOR FILING DATE: 1998-04-20
18 <160> NUMBER OF SEQ ID NOS: 6
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1674
24 <212> TYPE: DNA
25 <213> ORGANISM: Mouse
27 <400> SEQUENCE: 1
28 atgagtgatg gtacagcttc tgcccgatca tccagcccac ttgacaggga tcctgccttt 60
29 cgggtgatta cagttactaa ggaaacaggt ctaggtctga agatcctagg cggaattaac 120
30 aggaatgaag gaccgctggt gtatattcat gaagtcattc ctggaggtga ctgttacaag 180
31 gatggacgtt tgaagccagg agatcaactt gtctcaataa acaaggaatc tatgattggt 240
32 gtatcatttg aagaagcaaa aagcataatt accagagcca agttgaggtc agaatctccc 300
33 tgggagatag cattcatcag acaaaagtct tactgtggcc atccaggaaa tatttgctgt 360
34 ccatccccac aagtgtcaga agactgtgga cctcaaacct caacatttac tcttctttcc 420
35 tctccctctg aaacactact tccaaagact tcatccactc cccagactca ggactccact 480
36 ttcccttctt gtaaagcaat tcagacaaaa cctgaacacg ataaaacaga acatagtcca 540
37 attacttctt tggacaacag ccctgcagat acatctaatg cagacattgc tccagcctgg 600
38 actgatgatg attctggacc acaaggaaag atttccctaa atccttctgt tcgccttaag 660
39 gcagagaaac tggaaatggc tctcaattac ctcggtatac agccaacaaa ggaacaacgt 720
40 gaagccctga gagagcaagt ccaggccgac tcaaagggga ctgtgtcttt tggagatttc 780
41 gtccaggttg ccagaagttt gttttgcttg cagttggatg aagtaaatgt tggtgtccat 840
42 gaaatcccca gcatcttaga ctcacagctt ctcccctgtg attctctaga agcagatgaa 900
43 gtgggaaaac ttagacaaga agaaacgct gctctagagg aacggaatgt gcttaaggag 960
44 aagttactgg aatcagaaaa gcacaggaaa caattgatag aagaactcca gaatgtgaag 1020
45 caggaagcca aagctgtagc tgaggaaacc cgagctctgc gaagccggat tcatctcgca 1080
46 gaagctgcac agcggcaggc acacgggatg gaaatggatt atgaagaggt gatccgtctg 1140
47 ctagaggctg aggtctcaga actaaaggct cagctcgctg attattctga ccaaaataaa 1200
48 gaaagtgtcc aggacttgag aaaaagagtc accgttcttg actgccaatt gcgaaaatca 1260
49 gaaatggctc ggaaagcatt caaggcgtcc actgaaaggc tccttggttt catagaggct 1320
50 attcaagaag ttcttttgga tagttctgct cctttatcaa ctttaagtga agaagagct 1380
51 gtgctcgcat ctcagacttc gcttccactg ctggcaagga acggacgcag cttcccagca 1440
52 accctgcttc tggaatccaa ggagcttgtc agatctgtcc gtgccatact tgatatggac 1500
53 tgcttacctt acgggtggga ggaagcttac acagcagatg gaatcaagta cttcatcaac 1560
54 cacgtgacac agaccacgtc ctggatccac cccgtgatga gcgccctgaa cctgtcctgt 1620
```

RAW SEQUENCE LISTING   DATE: 06/28/2002
PATENT APPLICATION: US/09/647,978A   TIME: 11:05:41

Input Set : A:\57961.app
Output Set: N:\CRF3\06282002\I647978A.raw

55 gcagaggaga gtgaagagga ctgtcccaga gagctaacag acccgaaaag ctga   1674
58 <210> SEQ ID NO: 2
59 <211> LENGTH: 557
60 <212> TYPE: PRT
61 <213> ORGANISM: Mouse
63 <400> SEQUENCE: 2
64 Met Ser Asp Gly Thr Ala Ser Ala Arg Ser Ser Ser Pro Leu Asp Arg
65 1   5   10   15
67 Asp Pro Ala Phe Arg Val Ile Thr Val Thr Lys Glu Thr Gly Leu Gly
68   20   25   30
70 Leu Lys Ile Leu Gly Gly Ile Asn Arg Asn Glu Gly Pro Leu Val Tyr
71   35   40   45
73 Ile His Glu Val Ile Pro Gly Gly Asp Cys Tyr Lys Asp Gly Arg Leu
74   50   55   60
76 Lys Pro Gly Asp Gln Leu Val Ser Ile Asn Lys Glu Ser Met Ile Gly
77 65   70   75   80
79 Val Ser Phe Glu Glu Ala Lys Ser Ile Ile Thr Arg Ala Lys Leu Arg
80   85   90   95
82 Ser Glu Ser Pro Trp Glu Ile Ala Phe Ile Arg Gln Lys Ser Tyr Cys
83   100   105   110
85 Gly His Pro Gly Asn Ile Cys Cys Pro Ser Pro Gln Val Ser Glu Asp
86   115   120   125
88 Cys Gly Pro Gln Thr Ser Thr Phe Thr Leu Leu Ser Ser Pro Ser Glu
89   130   135   140
91 Thr Leu Leu Pro Lys Thr Ser Ser Thr Pro Gln Thr Gln Asp Ser Thr
92 145   150   155   160
94 Phe Pro Ser Cys Lys Ala Ile Gln Thr Lys Pro Glu His Asp Lys Thr
95   165   170   175
97 Glu His Ser Pro Ile Thr Ser Leu Asp Asn Ser Pro Ala Asp Thr Ser
98   180   185   190
100 Asn Ala Asp Ile Ala Pro Ala Trp Thr Asp Asp Asp Ser Gly Pro Gln
101   195   200   205
103 Gly Lys Ile Ser Leu Asn Pro Ser Val Arg Leu Lys Ala Glu Lys Leu
104   210   215   220
106 Glu Met Ala Leu Asn Tyr Leu Gly Ile Gln Pro Thr Lys Glu Gln Arg
107 225   230   235   240
109 Glu Ala Leu Arg Glu Gln Val Gln Ala Asp Ser Lys Gly Thr Val Ser
110   245   250   255
112 Phe Gly Asp Phe Val Gln Val Ala Arg Ser Leu Phe Cys Leu Gln Leu
113   260   265   270
115 Asp Glu Val Asn Val Gly Val His Glu Ile Pro Ser Ile Leu Asp Ser
116   275   280   285
118 Gln Leu Leu Pro Cys Asp Ser Leu Glu Ala Asp Glu Val Gly Lys Leu
119   290   295   300
121 Arg Gln Glu Arg Asn Ala Ala Leu Glu Glu Arg Asn Val Leu Lys Glu
122 305   310   315   320
124 Lys Leu Leu Glu Ser Glu Lys His Arg Lys Gln Leu Ile Glu Glu Leu
125   325   330   335
127 Gln Asn Val Lys Gln Glu Ala Lys Ala Val Ala Glu Glu Thr Arg Ala

RAW SEQUENCE LISTING   DATE: 06/28/2002
PATENT APPLICATION: US/09/647,978A   TIME: 11:05:41

Input Set : A:\57961.app
Output Set: N:\CRF3\06282002\I647978A.raw

```
128            340           345           350
130 Leu Arg Ser Arg Ile His Leu Ala Glu Ala Ala Gln Arg Gln Ala His
131         355           360           365
133 Gly Met Glu Met Asp Tyr Glu Glu Val Ile Arg Leu Leu Glu Ala Glu
134     370           375           380
136 Val Ser Glu Leu Lys Ala Gln Leu Ala Asp Tyr Ser Asp Gln Asn Lys
137 385           390           395           400
139 Glu Ser Val Gln Asp Leu Arg Lys Arg Val Thr Val Leu Asp Cys Gln
140           405           410           415
142 Leu Arg Lys Ser Glu Met Ala Arg Lys Ala Phe Lys Ala Ser Thr Glu
143         420           425           430
145 Arg Leu Leu Gly Phe Ile Glu Ala Ile Gln Glu Val Leu Leu Asp Ser
146     ·435           440           445
148 Ser Ala Pro Leu Ser Thr Leu Ser Glu Arg Arg Ala Val Leu Ala Ser
149     450           455           460
151 Gln Thr Ser Leu Pro Leu Leu Ala Arg Asn Gly Arg Ser Phe Pro Ala
152 465           470           475           480
154 Thr Leu Leu Leu Glu Ser Lys Glu Leu ·Val Arg Ser Val Arg Ala Ile
155           485           490           495
157 Leu Asp Met Asp Cys Leu Pro Tyr Gly Trp Glu Glu Ala Tyr Thr Ala
158     500           505           510
160 Asp Gly Ile Lys Tyr Phe Ile Asn His Val Thr Gln Thr Thr Ser Trp
161         515           520           525
163 Ile His Pro Val Met Ser Ala Leu Asn Leu Ser Cys Ala Glu Glu Ser
164     530           535           540
166 Glu Glu Asp Cys Pro Arg Glu Leu Thr Asp Pro Lys Ser
167 545           550           555
```

170 <210> SEQ ID NO: 3
171 <211> LENGTH: 2075
172 <212> TYPE: DNA
173 <213> ORGANISM: Human
175 <400> SEQUENCE: 3
176 cagcgcttgc agtcgggcta cggaggccgg gttgccagat tacgggaaag ccatttaaga 60
177 agttcctgga ataatattag tcagagtaat ataggatctg caggaagtgt ctcaagatag 120
178 ttggaaaaga agaatttcta gactcttcat caagatcttc atttatacag ctgttaaatc 180
179 caaggctact ttggtgaaag catgaataaa aatacatcta ctgtagtatc acccagtcta 240
180 cttgaaaagg atcctgcctt tcagatgatt acaattgcca aggaaacagg ccttggcctg 300
181 aaggtactag gaggaattaa ccggaatgaa ggcccattgg tatatattca ggaaattatt 360
182 cctggaggag actgttataa ggatggtcgt ttgaagccag gagatcaact tgtctcagtc 420
183 aacaaggaat ctatgattgg tgtatcattt gaagaagcaa aaagcataat taccagagcc 480
184 aagttgaggt tagaatctgc ttgggagata gcattcataa gacaaaaatc cgacaacatt 540
185 cagccagaaa atctgtcatg tacatcactt atagaagctt caggagaata tggacctcaa 600
186 gcctcaacat taagtctttt ttcttctcct cctgaaatac taatcccaaa gacctcatcc 660
187 actcccaaaa caaataatga catttttatct tcttgtgaga taaaaactgg atacaacaaa 720
188 acagtacaga ttccaattac ttcagaaaac agtactgtgg gtttgtctaa tacagatgtt 780
189 gcttctgcct ggactgaaaa ttatgggcta caagaaaaga tctccctaaa tccctctgtt 840
190 cgctttaagg cagagaaact ggaaatggct ctaaattatc ttggtattca gcccacaaag 900
191 gaacaacacc aagccctgag acagcaagta caagcagact caaaagggac agtgtctttt 960
192 ggagattttg tccaggttgc cagaaacttg ttttgcttgc agttggatga agtaaatgtt 1020
```

RAW SEQUENCE LISTING                    DATE: 06/28/2002
PATENT APPLICATION:  US/09/647,978A     TIME: 11:05:41

                Input Set : A:\57961.app
                Output Set: N:\CRF3\06282002\I647978A.raw

193 ggtgcacatg aaatttccaa tatattagat tcacagcttc ttccttgtga ttcttcagaa 1080
194 gcagatgaaa tggaaaggct caagtgtgaa agagatgatg ccttgaaaga agtaaataca 1140
195 cttaaggaaa aattattgga atcagataag caaaggaaac aattgacaga agagctccag 1200
196 aatgtgaaac aagaagccaa agctgtagtt gaagaaacaa gagccctgcg tagtcggatt 1260
197 catcttgctg aagctgctca gagacaggca catggaatgg aaatggacta tgaagaagtg 1320
198 atccgtctgt tagaggccaa gattacagag ctaaaggctc agcttgctga ttattctgac 1380
199 caaaataaag aaagtgttca ggatttaaaa aagagaatca tggtactcga ctgccaatta 1440
200 cgaaaatcag aaatggctcg aaaaactttt gaggcatcca ctgaaaagct tcttcatttt 1500
201 gtagaggcta ttcaagaagt attttctgat aattctactc ctttatcaaa tttaagtgaa 1560
202 agaagagctg tgttagcttc tcagacttcc ctcacaccac tgggaaggaa tggacgtagc 1620
203 atcccagcaa cgctggcgct tgaatctaag gaacttgtta aatctgttcg tgccttactt 1680
204 gatatggatt gtttacctta tgggtgggag gaagcttaca cagcagatgg aatcaagtac 1740
205 ttcatcaatc atgtaacaca gactacatcc tggatccatc ccgtgatgag tgtcctgaat 1800
206 ctatctcgct cagaggagaa tgaagaggat tgctctagag aactccccaa ccagaaaagt 1860
207 tgatggtttt ccttaggaag tggagctaca tggatgatgt gagcagagac gcataacatc 1920
208 caattctgag atgaaacagt ctaaaatagg agtaaagcat gcactacttg ttgaagtgtg 1980
209 aaatggagac tctggacttt gggtattttt gtaaaacttt tgatatttct gtatacattt 2040
210 aaaaaatcaa ttgcccaaaa aaaaaaaaaa aaaaa                              2075
213 <210> SEQ ID NO: 4
214 <211> LENGTH: 1662
215 <212> TYPE: DNA
216 <213> ORGANISM: Human
218 <400> SEQUENCE: 4
219 atgaataaaa atacatctac tgtagtatca cccagtctac ttgaaaagga tcctgccttt 60
220 cagatgatta caattgccaa ggaaacaggc cttggcctga aggtactagg aggaattaac 120
221 cggaatgaag gcccattggt atatattcag gaaattattc ctggaggaga ctgttataag 180
222 gatggtcgtt tgaagccagg agatcaactt gtctcagtca acaaggaatc tatgattggt 240
223 gtatcatttg aagaagcaaa aagcataatt accagagcca agttgaggtt agaatctgct 300
224 tgggagatag cattcataag acaaaaatcc gacaacattc agccagaaaa tctgtcatgt 360
225 acatcactta tagaagcttc aggagaatat ggacctcaag cctcaacatt aagtcttttt 420
226 tcttctcctc ctgaaatact aatcccaaag acctcatcca ctcccaaaac aaataatgac 480
227 attttatctt cttgtgagat aaaaactgga tacaacaaaa cagtacagat tccaattact 540
228 tcagaaaaca gtactgtggg tttgtctaat acagatgttg cttctgcctg gactgaaaat 600
229 tatgggctac aagaaaagat ctccctaaat ccctctgttc gctttaaggc agagaaactg 660
230 gaaatggctc taaattatct tggtattcag cccacaaagg aacaacacca gccctgaga 720
231 cagcaagtac aagcagactc aaaagggaca gtgtcttttg gagattttgt ccaggttgcc 780
232 agaaacttgt tttgcttgca gttggatgaa gtaaatgttg gtgcacatga aatttccaat 840
233 atattagatt cacagcttct tccttgtgat tcttcagaag cagatgaaat ggaaaggctc 900
234 aagtgtgaaa gagatgatgc cttgaaagaa gtaaatacac ttaaggaaaa attattggaa 960
235 tcagataagc aaaggaaaca attgacagaa gagctccaga tgtgaaaca agaagccaaa 1020
236 gctgtagttg aagaaacaag agccctgcgt agtcggattc atcttgctga agctgctcag 1080
237 agacaggcac atggaatgga aatggactat gaagaagtga tccgtctgtt agaggccaag 1140
238 attacagagc taaaggctca gcttgctgat tattctgacc aaaataaaga aagtgttcag 1200
239 gatttaaaaa agagaatcat ggtactcgac tgccaattac gaaaatcaga aatggctcga 1260
240 aaaacttttg aggcatccac tgaaaagctt cttcattttg tagaggctat tcaagaagta 1320
241 ttttctgata attctactcc tttatcaaat ttaagtgaaa gaagagctgt gttagcttct 1380
242 cagacttccc tcacaccact gggaaggaat ggacgtagca tcccagcaac gctggcgctt 1440
243 gaatctaagg aacttgttaa atctgttcgt gccttacttg atatggattg tttaccttat 1500
244 gggtgggagg aagcttacac agcagatgga atcaagtact tcatcaatca tgtaacacag 1560

```
245 actacatcct ggatccatcc cgtgatgagt gtcctgaatc tatctcgctc agaggagaat 1620
246 gaagaggatt gctctagaga actccccaac cagaaaagtt ga                    1662
249 <210> SEQ ID NO: 5
250 <211> LENGTH: 553
251 <212> TYPE: PRT
252 <213> ORGANISM: Human
254 <400> SEQUENCE: 5
255 Met Asn Lys Asn Thr Ser Thr Val Val Ser Pro Ser Leu Leu Glu Lys
256  1               5                  10                  15
258 Asp Pro Ala Phe Gln Met Ile Thr Ile Ala Lys Glu Thr Gly Leu Gly
259             20                  25                  30
261 Leu Lys Val Leu Gly Gly Ile Asn Arg Asn Glu Gly Pro Leu Val Tyr
262             35                  40                  45
264 Ile Gln Glu Ile Ile Pro Gly Gly Asp Cys Tyr Lys Asp Gly Arg Leu
265         50                  55                  60
267 Lys Pro Gly Asp Gln Leu Val Ser Val Asn Lys Glu Ser Met Ile Gly
268  65                  70                  75                  80
270 Val Ser Phe Glu Glu Ala Lys Ser Ile Ile Thr Arg Ala Lys Leu Arg
271             85                  90                  95
273 Leu Glu Ser Ala Trp Glu Ile Ala Phe Ile Arg Gln Lys Ser Asp Asn
274             100                 105                 110
276 Ile Gln Pro Glu Asn Leu Ser Cys Thr Ser Leu Ile Glu Ala Ser Gly
277         115                 120                 125
279 Glu Tyr Gly Pro Gln Ala Ser Thr Leu Ser Leu Phe Ser Ser Pro Pro
280     130                 135                 140
282 Glu Ile Leu Ile Pro Lys Thr Ser Ser Thr Pro Lys Thr Asn Asn Asp
283 145                 150                 155                 160
285 Ile Leu Ser Ser Cys Glu Ile Lys Thr Gly Tyr Asn Lys Thr Val Gln
286             165                 170                 175
288 Ile Pro Ile Thr Ser Glu Asn Ser Thr Val Gly Leu Ser Asn Thr Asp
289             180                 185                 190
291 Val Ala Ser Ala Trp Thr Glu Asn Tyr Gly Leu Gln Glu Lys Ile Ser
292             195                 200                 205
294 Leu Asn Pro Ser Val Arg Phe Lys Ala Glu Lys Leu Glu Met Ala Leu
295     210                 215                 220
297 Asn Tyr Leu Gly Ile Gln Pro Thr Lys Glu Gln His Gln Ala Leu Arg
298 225                 230                 235                 240
300 Gln Gln Val Gln Ala Asp Ser Lys Gly Thr Val Ser Phe Gly Asp Phe
301             245                 250                 255
303 Val Gln Val Ala Arg Asn Leu Phe Cys Leu Gln Leu Asp Glu Val Asn
304             260                 265                 270
306 Val Gly Ala His Glu Ile Ser Asn Ile Leu Asp Ser Gln Leu Leu Pro
307         275                 280                 285
309 Cys Asp Ser Ser Glu Ala Asp Glu Met Glu Arg Leu Lys Cys Glu Arg
310     290                 295                 300
312 Asp Asp Ala Leu Lys Glu Val Asn Thr Leu Lys Glu Lys Leu Leu Glu
313 305                 310                 315                 320
315 Ser Asp Lys Gln Arg Lys Gln Leu Thr Glu Glu Leu Gln Asn Val Lys
316             325                 330                 335
```

VERIFICATION SUMMARY   DATE: 06/28/2002
PATENT APPLICATION: US/09/647,978A   TIME: 11:05:42

Input Set : A:\57961.app
Output Set: N:\CRF3\06282002\I647978A.raw